Project B-209

PAINT PRODUCTION

A Manufacturing Opportunity in Georgia

Prepared for

The Georgia Department of Industry and Trade
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by

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March 1964

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Foreword

Unlike many of the special product studies completed by the Market Analysis Branch in recent years, this one focuses on products which are already produced in substantial volume in Georgia. The economic advantages offered by a Georgia location are reflected in the fact that paint production in the state is nearly twice that of any other state in the Southeast.

An excellent opportunity exists for additional plants, however. Production in the Southeast still supplies less than half of the amount used in the area. Major manufacturers now shipping into the area can expect a substantial increase in the profit on their sales in the area if they have production facilities here. Those not shipping into the area may now find it profitable to market their products here if they manufacture in Georgia.

An earlier Industrial Development Division study published in 1959 pointed out the potentials which paint manufacture offered for small communities in Georgia which might want to develop "home-grown" industry. In 1964 excellent opportunities still remain in the paint field -- for major producers as well as for others.

Questions, comments, and requests for additional information are invited.

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Summary

In a national context of moderate growth and decentralization, Georgia's paint industry has enjoyed rapid expansion. Despite this expansion, the Southeast supplied less than half of its own demand for paint products in 1961. The seven-state area comprising Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee used an estimated 68 million gallons of paint in 1961; production was approximately 31 million gallons in that year.

Since 1958, the physical output of the U. S. paint industry has grown at a moderate 2% a year, reaching 643 million gallons in 1962. The industry is expanding most rapidly in the South, while production in the traditional New England, Middle Atlantic, and East North Central paint manufacturing centers has not kept pace with the national expansion record. The trend toward plants serving regional markets has been accompanied by increased emphasis on medium-sized plants with 100 to 249 employees, primarily at the expense of larger plants. As a result of continually increased emphasis on paint technology, the industry now produces a more diverse line of products, particularly industrial coatings, than ever before and does so to laboratory specifications, with a more consistent product and lower labor costs.

The seven-state market for trade paints totaled an estimated 43 million gallons in 1961, including more than 5 million gallons for new construction, 30 to 35 million gallons for repainting, and about 4 million gallons for aftermarket painting of automobiles.

Industrial coatings requirements in the seven states totaled about 25 million gallons in 1961, including nearly 12 million gallons of furniture finishes, 8 to 11 million gallons for the metalworking industry, and more than 2.5 million gallons of coatings specially formulated to protect industrial installations in the area.

Although still far from meeting the area's needs, production in the seven states has expanded rapidly from 12 million gallons in 1954 to 26 million gallons in 1958 and to 31 million gallons in 1961. Georgia produces nearly twice as much paint as any other state in the area.

Georgia's rapid growth cannot be attributed solely to lower manufacturing costs. The state does have lower costs for direct labor, laboratory technicians,

utilities, and plant construction and offers excellent service at competitive costs for most raw materials. But savings on individual manufacturing inputs are not likely to be nearly as large as savings on distribution costs to the seven-state market.

Experience with freight savings analyses for similar products has shown that manufacturers who now ship into the seven-state area from combinations of shipping points such as Chicago and New York can save up to 30% on freight bills for the area if they locate a plant in Georgia. For national manufacturers who ship into the area from northern states, establishment of a Georgia plant can increase net profits on sales in the area from approximately 5% to more than 7%. For a manufacturing firm that limits its sales to northern areas because shipping expenses make southeastern sales relatively less profitable, location of a plant in Georgia would permit the company to expand operations into a large market and to earn profits matching those of northern plants.

To manufacturers of industrial coatings, rapid customer service has become an important consideration. Georgia's transportation facilities include 30 rail carriers and 100 scheduled motor carriers providing efficient service to points in the seven-state southeastern market.

Because of its regional distribution facilities, Georgia wholesaled almost twice as much paint as any other state in the area in 1958, and was eleventh in the nation in wholesale paint sales in that year.

INTRODUCTION

Several well-known paint manufacturing companies have established plants in Georgia to serve the southeastern market. The facts which are likely to have influenced the corporate decisions to build in the state appear to favor continuing rapid expansion of the industry in Georgia. The object of this report is to present some of these facts.

Three approaches are taken. First, the paint industry of the United States is briefly analyzed to establish pertinent trends. Findings in this section are based largely on published statistical sources. Second, consumption in the Southeast is estimated and compared with production in the area. Estimates made for three segments of the trade paint market and three segments of the industrial coatings market are based both on published statistics and on interviews with informed people in the field.

Finally, the advantages of manufacturing paint products in Georgia for distribution to the Southeast are presented. Sources of information for this section include both the files of the Industrial Development Division and the observation of men in the paint industry. In all three sections, basic and collaborative statistical information are presented in tabular form.

Interregional cost comparisons are restricted to one important item -- shipping expenses. The report does not ascertain complete operating costs for a Georgia plant, nor does it go into technical details. The recent growth and present size of Georgia's paint industry demonstrate that it is both economically and technologically sound to manufacture in the state.

PAINT INDUSTRY TRENDS

The U. S. paint industry is experiencing modest growth. Between 1947 and 1958 the total physical output of paint, varnish, and lacquer products increased at 1.7% a year. More recently, output has grown at about 2% a year, reaching 643 million gallons in 1962. U. S. production of both trade and industrial paints, varnish, and lacquer for the years 1958 to 1962 are shown in Table 1.

Table 1

U. S. PRODUCTION OF PAINT, VARNISH, AND LACQUER
(in thousands of gallons)

	Trade	Industrial	Total
1958	320.8	273.8	594.6
1959	346.0	304.3	650.3
1960	343.7	319.4	663.1
1961	329.0	294.3	623.3
1962	337.3	306.1	643.4

Source: U. S. Department of Commerce Current Industrial Reports

In the decade preceding 1958, trade paint production expanded at a somewhat more rapid rate than industrial paint production for two reasons -- the post-World War II effort to clean up and redecorate real estate and the following construction boom. Industrial paint production also expanded, but growth was limited by decreased demand for painted surfaces on finished products. During the period shown in Table 1, industrial paint output had the more rapid growth, due largely to increased demand for consumer products requiring paint and increased emphasis on decoration and corrosion control by industry.

When measured in terms of dollar volume, the growth of the paint industry has been more impressive. Between 1947 and 1958, shipments increased from $1.2 billion to $1.6 billion and by 1962 had reached $1.8 billion. The rapid growth of paint industry dollar volume relative to physical volume is obviously indicative of a trend toward higher prices for paint products.

The trend toward decentralization and regional production units is especially significant. The industry is expanding more rapidly in the South and West than in traditional northern paint manufacturing centers, and large plants are becoming less important than medium-sized plants. The trend is the result of high and rising transportation costs.

For many years New York and Illinois were the twin strongholds of paint making, but today rising transportation costs have helped to create other centers, most notably California. The trend in regional growth is demonstrated in Table 2.

Table 2

TRENDS IN PAINT MANUFACTURING EMPLOYMENT BY REGION

Region	Employment			Per Cent of U. S.		
	1947	1954	1958	1947	1954	1958
New England	2,541	2,472	2,233	4.8	4.4	3.9
Middle Atlantic	17,253	17,033	16,083	32.3	30.1	28.2
East North Central	19,417	20,111	19,878	36.4	35.5	34.9
West North Central	3,264	3,953	3,779	6.1	7.0	6.6
South	5,511	6,799	8,385	10.3	12.0	14.7
West	5,426	6,209	6,676	10.2	11.0	11.7
U. S. Total	53,412	56,580	57,034			

Source: U. S. Bureau of the Census, U. S. Census of Manufactures (1947, 1954, 1958)

Expansion has been concentrated in the West (mostly in California) and especially in the South, while the northern regions have decreased their portion of total U. S. production. New England and the Middle Atlantic states have actually lost employment, contrary to the national trend.

Table 3 shows that medium-sized plants, with 100 to 249 employees, are becoming more important than other sizes. They produced more than 30% of the total value added by the industry in 1958; this growth has been at the expense of the large plants rather than the small ones. Establishments with less than 100 employees have maintained their position, producing about 40% of the total value added by the industry. Plants with 500 or more employees produced 16.3% of the value added in 1947, but only 10.4% in 1958.

Table 3

TRENDS IN PAINT PLANT OUTPUT BY EMPLOYMENT SIZE

Employees	Number of Plants			Per Cent of Value Added		
	1947	1954	1958	1947	1954	1958
1 - 4	326	436	459	1.4	1.5	1.4
5 - 9	227	250	269	2.5	2.5	2.5
10 - 19	226	231	286	5.4	4.6	6.0
20 - 49	237	257	279	12.8	11.7	12.7
50 - 99	148	160	159	17.7	17.2	17.2
100 - 249	89	103	108	23.7	29.7	30.1
250 - 499	27	25	24	20.2	21.7	19.7
500 - 999	9	5	5	16.3	11.0	10.4
1,000 - 2,499	2	2	2			
Total	1,291	1,469	1,591			

Source: U. S. Bureau of the Census, U. S. Census of Manufactures (1947, 1954, 1958)

The trend toward more complex paint technology is well established. Within a lifetime the paint industry has transformed itself from a grind-and-mix operation to a complicated chemical industry. The most far-reaching changes have been made in the binder for the base of protective coatings. The use of plastics for surface coatings introduced odorless, water-thinnable paints. Scientifically manufactured varnish came with the development of synthetic resins and quick-drying oils.

The major result of these advances has been a more diverse line of manufactured products. Other significant results include manufacturing to laboratory specification, a more consistent product, lower labor costs, and more and better uses for protective coatings, particularly in industry.

THE SOUTHEASTERN MARKET

The Southeast supplies less than half of its own demand for paint products. The seven-state area comprising Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee used an estimated 68 million gallons of paint in 1961; production was approximately 31 million gallons in that year.

Paint Consumption

Trade Paint. Trade paints are most frequently defined as shelf-type commodities which are generally distributed through wholesale-retail channels. In this report, the seven-state market for trade paints is discussed in terms of three demands: (1) new construction demand, (2) repainting demand, and (3) after-market automotive finishes.

Nationally, new construction uses from 10% to 15% of the total trade paint output. Paint requirements for new construction are closely related to residential construction activity, because new housing activity is the largest component of total new construction activity and creates the need for other types of construction, such as schools, hospitals, churches, stores, and garages.

Total private nonfarm housing starts have maintained a consistently high level since 1958, but paint requirements for new construction activity have not achieved the same record. Although demand for interior paints has grown since paint has become the nearly exclusive wall decoration material, the trend in exterior sidings of new houses has been away from wood siding to brick and stone. Also, even the houses with wood siding have a greater proportion of glass than ever before, thereby reducing the areas requiring paint.

Paint requirements for new construction in the seven-state area exceeded five million gallons in 1961. According to the National Association of Home Builders, the area had 224,400 private nonfarm housing starts in that year, or 15.9% of the U. S. total of 1,450,900. Data for the seven states and the U. S. covering the years from 1959 through 1962 are shown in Table 4. The figures do not represent building permit activity, but are estimates made by adjusting building permit data with ratios derived from year-built data appearing in the 1960 U. S. Census of Housing and official census estimates of total housing starts for the 1959-1960 period.

Table 4

TOTAL PRIVATE NONFARM HOUSING STARTS

State	1959	1960	1961	1962
Alabama	32,700	20,600	21,900	23,300
Florida	109,700	81,500	73,900	70,200
Georgia	37,800	33,500	32,900	39,800
Mississippi	17,800	23,600	19,900	19,200
North Carolina	37,700	33,600	39,300	35,100
South Carolina	20,400	14,000	12,800	14,700
Tennessee	30,000	24,500	23,700	22,100
Seven-State Total	286,100	231,300	224,400	224,400
United States	1,528,200	1,257,400	1,290,700	1,450,900

Source: National Association of Home Builders, Special Report 63-3, June 4, 1963

Repainting demand accounts for about 75% to 80% of the total national trade paint demand. The continually increasing number of houses assures a steadily growing underpinning for the trade paint market. Market growth is also enforced by the fact that consumers are becoming more sensitive to color and are repainting because existing colors have become obsolete. But the repainting cycle, and therefore the total repainting demand, is also sensitive to household income. As the income of a household increases, the frequency of repainting the home increases.

Paint requirements for repainting in the seven-state area were an estimated 30 million to 35 million gallons for the year 1961. Table 5 shows the total number of housing units in each of the seven states in 1950 and 1960. Table 6 presents the income per household statistics for the years 1950 and 1960-1962.

In the decade preceding 1960, the number of housing units in the seven-state area increased by 28.4%. Because the total number of units in place grew at a faster rate in the area than in the U. S. as a whole, the area increased its portion of the number of housing units in the U. S. from 12.9% in 1950 to 13.1% in 1960. Average income per household in the seven-state

Table 5

NUMBER OF HOUSING UNITS IN THE U. S.
AND SEVEN SOUTHEASTERN STATES

	1950	1960
Alabama	843,857	967,466
Florida	952,131	1,776,961
Georgia	966,672	1,170,039
Mississippi	609,329	628,945
North Carolina	1,088,367	1,322,957
South Carolina	557,672	678,379
Tennessee	921,837	1,084,365
Seven-State Total	5,939,865	7,629,112
United States	45,983,398	58,326,357

Source: U. S. Bureau of the Census, U. S. Census of Housing (1950 and 1960)

Table 6

INCOME PER HOUSEHOLD IN THE U. S.
AND SEVEN SOUTHEASTERN STATES

	1950	1960	1961	1962
Alabama	2924	4977	5232	4754
Florida	3646	5718	5752	5620
Georgia	3430	5363	5476	5307
Mississippi	2264	4079	4303	4357
North Carolina	3545	5276	5867	5546
South Carolina	3066	4676	5215	5137
Tennessee	3574	5017	5247	5017
Seven-State Average	3207	5015	5299	5105
United States	4521	6385	6723	6661

Note: Information coyprighted by Sales Management, "Survey of Buying Power." Further reproduction is forbidden.

area increased by 56.4% in the decade, compared with 40.2% for the nation; the absolute increase was $1,808 for the seven states and $1,864 for the nation. Average income per household increased during 1961 but decreased during 1962 for both the seven-state area and the nation. The nation showed the greater increase for the two-year period.

The fact that both parameters of repainting demand, number of housing units and income per household, are increasing more rapidly in the seven-state area than in the nation is indicative of the relatively rapid growth of the market for repainting trade paint in the seven-state area.

About 10% to 15% of the U. S. trade paint output consists of after-market automotive finishes. As can be seen from Table 7, the seven-state area has a large and growing percentage of the vehicle registrations in the United States. The 1958 Census of Business shows that the area had 422 automotive paint shops with receipts of $9,050,000 (10.3% of U. S.) and 9,219 general automotive repair shops with receipts of $185,729,000 (11.8% of U. S.). An estimated four million gallons of after-market automotive finishes were sold in the seven-state area in 1961.

Table 7

MOTOR VEHICLE REGISTRATION IN THE U. S. AND THE SEVEN-STATE AREA
(in thousands)

Year	Seven-State Registration	U. S. Registration	Seven-State As % of U. S.
1950	5,546	49,162	11.3
1955	7,854	62,694	12.5
1960	9,790	73,769	13.3
1961	10,114	75,847	13.3
1962	10,638	79,023	13.4

Source: U. S. Bureau of the Census, Statistical Abstract of the United States, 1963

Total trade paint requirements for the three end uses discussed was an estimated 43 million gallons in 1961.

At the retail level, consumers in the seven-state area purchase trade paint products largely from hardware stores, building supply dealers, and paint, glass, and wallpaper stores. Estimated retail sales by these three outlets in 1958 are shown in Table 8.

Industrial Coatings. Industrial coatings are those paint products which are specifically formulated to meet the conditions of application and the use of the article to which they are applied. They are sold directly to manufacturers.

Seven-state markets for industrial coatings are estimated in this study for three end-use demands: (1) the furniture industry, (2) the metalworking industry, and (3) maintenance coatings specifically formulated for use on the interiors and exteriors of industrial installations requiring protection against extreme temperatures, fungi, chemicals, and fumes.

In 1961, the furniture industry in the seven-state area used nearly 12 million gallons of finishes. The industry largely produced non-upholstered wood household furniture, but other household furniture and fixtures (both wood and metal) and wood and metal office furniture and fixtures were also manufactured. Total shipments in 1961 were valued in excess of $1 billion. By far the largest furniture producing state in the area was North Carolina, followed by Florida, Georgia, and Tennessee. The seven-state furniture industry is the largest single industrial coatings consuming industry in the area and is believed to purchase a larger volume of chemical coatings than any of the other end-use groups previously listed.

Nationally, the metalworking industry, the second end-use group listed, is the largest consumer of industrial coatings. It is less significant than the furniture industry in the seven-state area, purchasing an estimated 8 to 11 million gallons of coatings in 1961. The group includes primary metal industries (e.g., nonferrous wire drawing), fabricated metal products (e.g., metal cans, plumbing and non-electrical heating equipment, structural metal products, metal stampings), non-electrical machinery (e.g., construction equipment, textile industry machinery), electrical machinery (e.g., electrical distribution products, household appliances), transportation equipment (e.g., motor vehicles, aircraft, ships and boats), and instruments (e.g., mechanical measuring devices). Four of the six metalworking industry groups manufactured significant quantities of products in the seven-state area.

Table 8

ESTIMATED RETAIL PAINT SALES OF PRINCIPAL OUTLETS
IN SEVEN SOUTHEASTERN STATES, 1958

(in thousands of dollars)

Area	Hardware Stores			Paint, Glass, and Wallpaper Stores			Building Supply Dealers			Total Paint Sales of Three Outlets
	No. of Stores	Total Sales	Paint Sales	No. of Stores	Total Sales	Paint Sales	No. of Stores	Total Sales	Paint Sales	
Alabama	513	$ 48,243	$ 8,201	104	$ 7,857	$ 5,343	163	$ 39,598	$ 2,455	$ 15,999
Florida	881	67,407	11,459	347	30,814	20,954	372	63,785	3,955	36,367
Georgia	640	59,908	10,184	94	7,010	4,767	199	38,021	2,357	17,308
Mississippi	311	28,506	4,846	54	3,206	2,180	115	13,828	857	7,883
North Carolina	682	65,508	11,136	113	7,268	4,942	265	62,759	3,891	19,969
South Carolina	332	24,602	4,182	67	4,157	2,827	108	30,300	1,879	8,888
Tennessee	574	57,069	9,702	138	8,518	5,792	185	34,789	2,157	17,651
Seven-State Total	3,933	$ 351,243	$ 59,710	917	$ 68,830	$ 46,804	1,407	$ 283,080	$17,551	$ 124,065
United States	34,721	$2,721,969	$462,735	11,168	$738,389	$502,105	12,301	$1,596,007	$98,952	$1,063,792

Sources: Data for number of stores and total sales from U. S. Census of Business: 1958. Estimates of paint sales based on: (1) National Hardware Retail Dealers Association survey showing 17% of hardware sales to be paint, (2) Retail Paint and Wallpaper Distributors of America survey showing 68% of sales to be paint, (3) Building Supply News survey showing 6.2% of dealers' sales to be paint.

The fabricated metal products group shipped products valued at about $1.4 billion in 1961, a large part of which consisted of structural metal products. Largest producing states were Alabama, Florida, and Tennessee.

The non-electrical machinery group shipped products valued at about $900 million in 1961. Output was concentrated in farm machinery and equipment, construction equipment, and special industry machinery (such as textile, food products, and paper machinery). Largest producing states were Georgia, North Carolina, and Tennessee.

Electrical machinery valued at more than $1.0 billion was produced in the seven-state area in 1961. About half of this output was in household appliances, communications equipment, and electronic components. North Carolina and Tennessee were the largest producing states.

Output of the seven-state transportation equipment industry exceeded $2.0 billion in 1961. Production was concentrated in motor vehicles and aircraft and ship building and repairing. States with the largest output were Alabama and Georgia.

According to the 1958 Census of Manufactures, the metalworking industries of the United States employed 102,954 production workers (1.6% of total employment) in the specific operations of painting, lacquering, and enameling. The seven-state area employed 9,419 in these operations, as shown in Table 9.

Table 9

PRODUCTION WORKERS EMPLOYED IN PAINTING, LACQUERING, AND ENAMELING BY METALWORKING ESTABLISHMENTS, 1958

Area	Number of Establishments	Number of Employees
Alabama	79	622
Florida	127	547
Georgia	98	5,594
Mississippi	40	300
North Carolina	104	432
South Carolina	21	124
Tennessee	99	1,800
Seven-State Total	568	9,419
United States	9,181	102,954
Seven-State Proportion of U. S.	6.2%	9.1%

Source: U. S. Census of Manufactures: 1958

More than 2.5 million gallons of specially formulated maintenance coatings were purchased to protect industrial installations in the area. Industries requiring large quantities of specially formulated maintenance coatings include the chemical industry, the pulp and paper industry, and gas utilities. Tennessee was the largest consuming state.

The seven-state market for industrial coatings totaled about 25 million gallons in 1961.

Paint Production

The seven-state area produced an estimated 31 million gallons of paint in 1961. Area output has been increasing at a far more rapid rate than total U. S. output. Between 1947 and 1954, several large manufacturers of nationally known paints located within the area, increasing the area's output by 34%. Most of them located in Georgia and almost tripled the paint output of the state during the seven-year period.

Total production in the seven-state area more than doubled between 1954 and 1958, from about 12 million gallons to 26 million gallons. Since 1958, selected manufacturers in Georgia have reported annual increases of 12% and 22%, but industry observers estimate that the total production of manufacturers in the seven-state area has increased at a rate of about 5% annually. Total output in 1961 was approximately 31 million gallons, or 5% of national production in that year.

Up-to-date detailed statistics on paint production in the area are not available. The 1958 Census of Manufactures provides the most recent data, and Table 10 and Appendix 1 are based on this source.

Table 10

TOTAL PAINT PRODUCTION IN SEVEN SOUTHEASTERN STATES, 1958

Area	Paint Production (in thousands of dollars) Trade	Industrial	Total
Alabama	$ 4,050*	$ 2,470	$ 6,520*
Florida	12,265	1,542	13,807
GEORGIA	21,563	7,628	29,191
Mississippi	300*	550*	850*
North Carolina	4,054	8,128	12,182
South Carolina	950*	950*	1,900*
Tennessee	7,909	1,100	9,009
Seven-State Total	$51,091	$22,378	$73,469
Seven-State Total (in thousands of gallons)	17,300*	8,700*	26,000*
U. S. Total (in thousands of gallons)	303,930	244,900	548,830
Seven-State Proportion of U. S.	5.70%	3.57%	4.74%

*Estimated from statistics in original source.

Source: U. S. Bureau of the Census, U. S. Census of Manufactures: 1958

ADVANTAGES OF A GEORGIA LOCATION

In a national context of moderate growth and decentralization, Georgia's paint industry has enjoyed rapid expansion. This has been due more to Georgia's central location for distribution to the large and growing southeastern market than to the manufacturing economies which are available to Georgia manufacturers. Companies presently manufacturing paint in Georgia are listed in Table 11.

Manufacturing

Savings on individual manufacturing inputs cannot be very large at any new location. By far the largest manufacturing input is raw materials, which represent from 45% to 50% of net sales price. Large multi-plant companies are likely to negotiate national raw material purchasing contracts, so plant location does not have an important effect on raw material costs. But even small companies find that many raw materials for paint manufacture, such as titanium dioxide, are priced on a freight-allowed basis, making raw material costs essentially the same at any location.

The only significant geographical variable in buying most paint raw materials is service, and purchasers in Georgia have easy access to the complex of chemical distributors in the state's major cities. Most of the regular advertisers in American Paint Journal have either branch offices or agents within the state. More specifically, all major manufacturers of paint vehicles are represented in the state and offer overnight delivery on most vehicles; every titanium dioxide producer has a branch office in the state.

Although many other manufacturing inputs, such as direct labor, laboratory technicians, and utilities, as well as plant construction, cost less in Georgia than in northern states, annual savings are not likely to be as large as savings in distribution costs.

Distribution

Shipping costs incurred in transporting paint from the factory to national wholesale and retail outlets frequently account for 8% or more of the total manufacturer's price for paint. Factories serving local markets spend a much smaller proportion on shipping, and those serving regional markets usually

Table 11
GEORGIA PAINT MANUFACTURERS

Firm	City	Products	Employment
Boatwright Paint and Varnish Works, Inc. (Subsidiary of Wyandotte Paint Products Co.)	Norcross	Paint and varnish	A
Camco Paints	Decatur	House paints	A
Capital City Paint Co.	Chamblee	Oil paints, rubber base paints	A
Decatur Chemical Co. (Division of Iowa Paint Manufacturing Co.)	Decatur	Paint and allied coatings	B
Dixie Paint and Varnish Co., Inc.	Brunswick	Paints, varnishes, enamels	C
du Pont de Nemours, E.I., and Co., Inc.	Tucker	Paints, lacquers, thinners	C
Eagle-Bridges Paint Co., The	Macon	Paints, surface coatings	A
Gibson, E.B., Lacquer Co.	Toccoa	Paints, lacquers, varnishes	A
Gillman, S.L., Paint Co.	Atlanta	Paints, varnishes, enamels	A
Glidden Co., The	Atlanta	Paints, varnish, industrial coatings	C
Linbeck Paint Corp.	Decatur	Paints, enamels, varnishes	A
Minnesota Paints, Inc.	Atlanta	Paints, stains, varnishes, enamels	B
Pittsburgh Plate Glass Co.	East Point	Paint, enamels, related products	D
Plaxicrete, Inc.	Chamblee	Paint specialties	A
Precision Paint Corp.	Chamblee	Paint	B
Quality Paint & Roofing Co.	Augusta	Paints	A
Sanders Paints, Inc.	Tucker	Paints, enamels, lacquers, thinners, stains	B
Savannah Paint Manufacturing Co.	Savannah	Paints, industrial finishes	A
Sawyer, Tom, Paints, Inc.	Brunswick	Paints and varnishes	A
Smith, William Armstrong, Co.	East Point	Paints	C
Snyder Brothers Co.	Toccoa	Lacquers, stains, fillers, enamels	C
Spencer-Adams Paint Co.	Atlanta	Paint products	A
Southern Ink and Lacquer	Stone Mountain	Inks and lacquers	A
Southern Paint and Varnish Co.	Macon	Paints	A
Southern Paint Products Co.	Atlanta	Paints	B
Southport Paint Co., Inc.	Savannah	Paints, roof coatings	B
Superior Lacquer Co.	Toccoa	Lacquers, stains, fillers, related products	A
Surface Coatings, Inc.	Atlanta	Coatings for masonry, concrete, and metals	A
Thomas Paint Manufacturing Co.	Atlanta	Paint and related products	B
Zac-Lac Paint and Lacquer Corp.	Atlanta	Enamels, lacquers, industrial finishes	B

Employment Code

A = 1 to 25 C = 51 to 100
B = 26 to 50 D = 101 to 250

spend less than 6% of their sales price on shipping expenses, but factories shipping out of the North and into the seven-state area may spend more than 10%. For example, to ship a large quantity of white exterior paint selling at a factory price of $2.40 per gallon from Cleveland, Ohio, to Atlanta will cost between 14 and 25 cents per gallon, depending on the quantity shipped and the means of transport. Paint shipped from Cleveland to southern Florida would have to absorb enormous shipping expenses in order to compete with local manufacturers, since Atlanta would mark only the half-way point for a trip to southern Florida.

Experience with freight savings analyses for similar products has shown that manufacturers who ship into the seven-state area from combinations of shipping points such as Chicago and New York can save up to 30% on freight bills for the area if they locate a shipping point in Georgia. For example, a company which spends $200,000 each year to ship paint by motor carrier into the seven-state area from Chicago and New York (from either city to a given destination, depending on which is cheaper) would spend only $140,000 per year on distribution costs for the area if it manufactured paint in Georgia, resulting in an annual saving of $60,000.

It is largely this opportunity to save 30% on shipping expenses from northern factories into the Southeast which has been responsible for the expansion of the paint industry in Georgia. For national manufacturers who ship into the area, establishment of a Georgia plant can increase net profits on sales in the area from approximately 5% to more than 7%. For a manufacturing firm that limits its sales to northern regions because shipping expenses make southeastern sales relatively less profitable, location of a plant in Georgia would permit the company to expand operations and to earn profits matching those of northern plants.

To manufacturers of industrial coatings, rapid customer service has become an important consideration, despite the fact that it is not a purely economic one. There is a growing tendency among manufacturers to supply their specialty products as near the time of demand as possible. New production techniques have enabled them to accept an order and produce and deliver the product in less than a week almost as a matter of course; even overnight order filling has become relatively common. Because such service is available from some

industrial coatings manufacturers, consumers often expect it from all and may change suppliers for more rapid service even when a slightly greater expense is involved.

Georgia is well equipped to serve the seven-state southeastern market. Facilities include 30 rail carriers and about 100 scheduled motor carriers. All but 11 of the state's 159 counties have rail service. The number of motor carriers having certificated interstate operating rights to transport "general commodities" with the "usual exceptions" directly to and from 30 Georgia cities is shown in Table 12. Normal transit times in days (mornings) for truckload shipments from Atlanta are shown on Map 1. Times for less-than-truckload shipments from Atlanta are shown on Map 2. Measured time excludes the day of pick-up but includes the day, or morning, of delivery. Service from the smallest communities in the state to population centers in the seven-state region seldom exceeds one day more than service from Atlanta.

Table 12

NUMBER OF CERTIFICATED MOTOR CARRIERS
SERVING 30 GEORGIA CITIES

Albany	27	Macon	36
Americus	25	Marietta	53
Athens	38	Milledgeville	27
Atlanta	76	Moultrie	23
Augusta	40	Newnan	31
Bainbridge	25	Rome	40
Brunswick	22	Savannah	38
Carrollton	26	Thomasville	25
Columbus	36	Toccoa	34
Cordele	25	Valdosta	27
Dalton	38	Vidalia	20
Dublin	24	Warner Robins	28
Gainesville	35	Waycross	24
Griffin	30	Waynesboro	24
LaGrange	30	Winder	36

MAP 1

TRANSIT TIMES ON DIRECT TRUCKLOAD SHIPMENTS

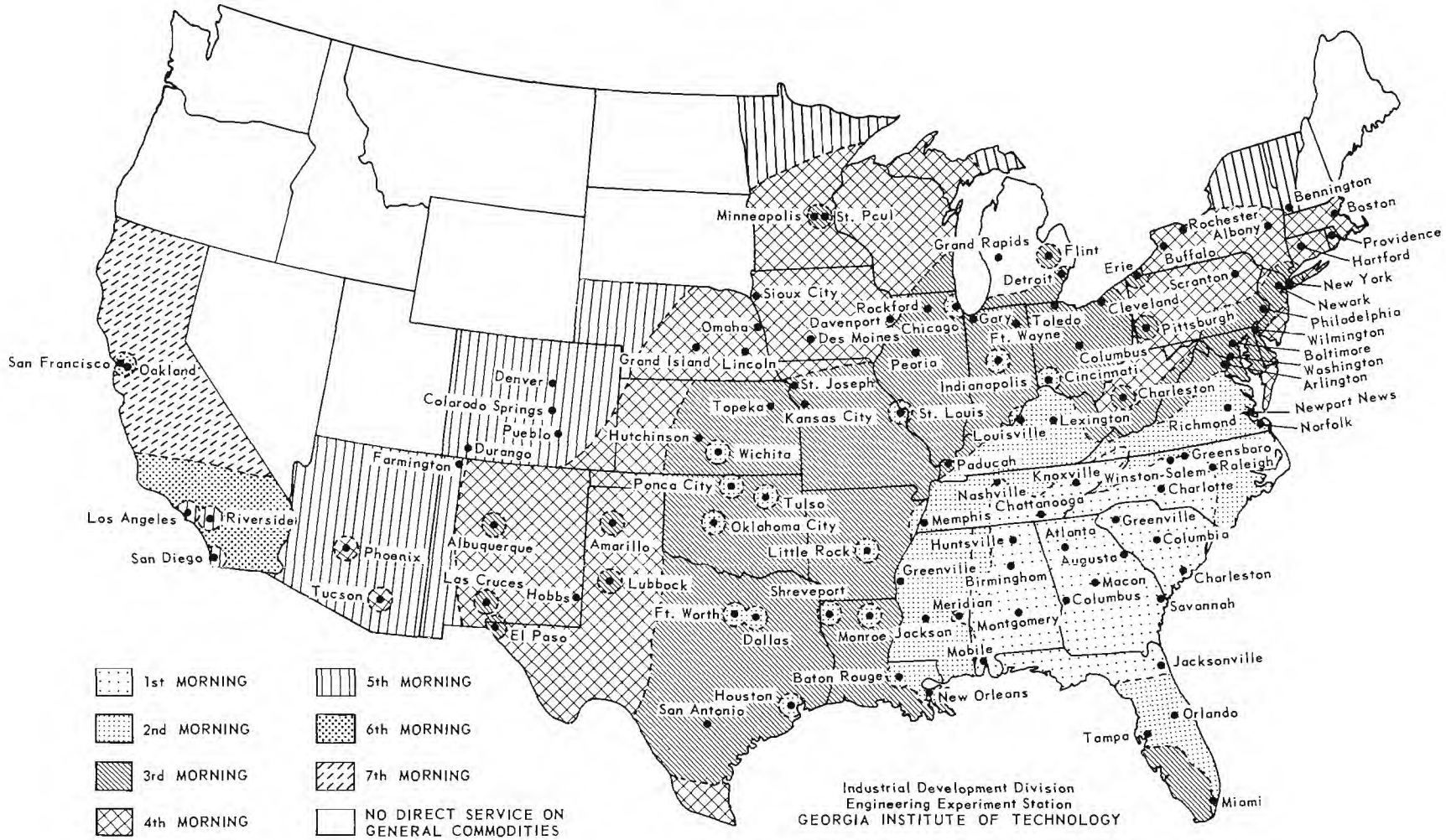
Base Point: Atlanta

Industrial Development Division
Engineering Experiment Station
GEORGIA INSTITUTE OF TECHNOLOGY

MAP 2

TRANSIT TIMES ON DIRECT LESS-THAN-TRUCKLOAD SHIPMENTS

Base Point: Atlanta



Georgia's distribution facilities have made the state the major paint distributing state in the Southeast. Georgia wholesales almost twice as much paint as any other state in the area. Data are shown in Table 13. These data are neither up-to-date nor representative of total paint sales in the area, but they do indicate a general situation which is not likely to have changed.

Table 13

WHOLESALE PAINT AND VARNISH TRADE
IN SEVEN SOUTHEASTERN STATES

State	Sales	Establishments
Alabama	$ 4,906,000	27
Florida	17,388,000	76
GEORGIA	26,706,000	41
Mississippi	1,845,000	11
North Carolina	13,785,000	45
South Carolina	3,642,000	17
Tennessee	11,694,000	32
Seven-State Total	$ 79,966,000	259

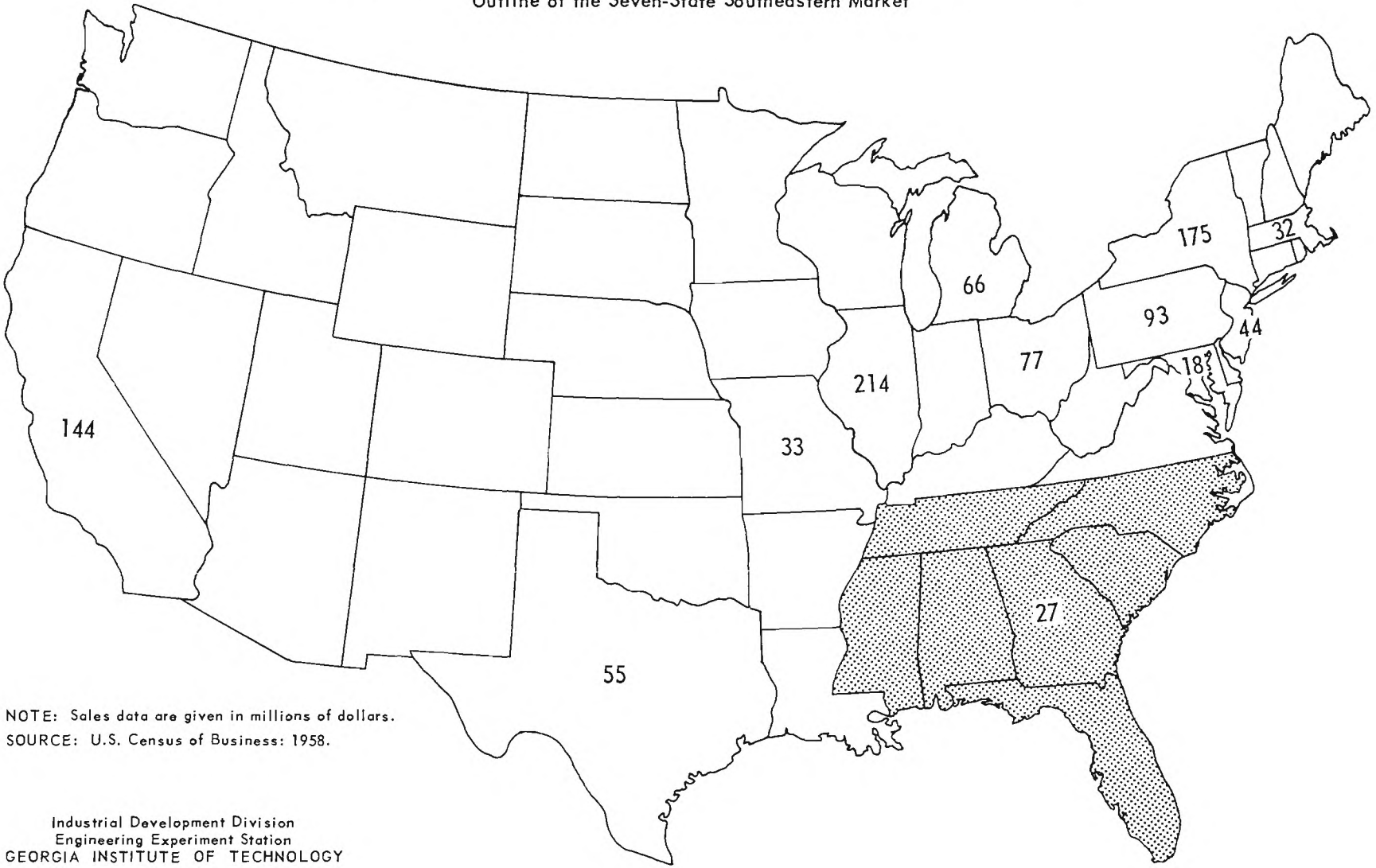
Source: U. S. Bureau of the Census, U. S. Census of Business: 1958

Because of its regional distribution position, Georgia was eleventh in the nation in wholesaling paints in 1958. Sales for the top dozen states are indicated in Map 3. Paint shipments into Georgia for redistribution to the Southeast originate largely in Illinois, Maryland, New Jersey, New York, and Ohio. Other points of origin include those in Missouri, Pennsylvania, Texas, and Virginia.

MAP 3

THE TOP TWELVE STATES IN WHOLESALE PAINT AND VARNISH SALES

Outline of the Seven-State Southeastern Market



NOTE: Sales data are given in millions of dollars.

SOURCE: U.S. Census of Business: 1958.

Industrial Development Division
Engineering Experiment Station
GEORGIA INSTITUTE OF TECHNOLOGY

CONCLUSION

High and rising transportation costs on paint favor plants serving regional markets. It is therefore reasonable to expect paint production to expand most rapidly in those areas where demand greatly exceeds supply. This has been the case in the Southeast, where output has grown at a far more rapid rate than in the over-producing northern regions.

But since the area still produces only about half of its own demand for paint products, further growth can be expected. Companies presently shipping into the Southeast should consider investing in manufacturing facilities in the region for increased profit. Companies whose sales areas are presently restricted to other regions should consider moving into the unsaturated southeastern market by investing in production facilities within this area.

Georgia is a desirable site from which to serve the seven-state market, primarily because the state's transportation facilities provide efficient service to the area. The soundness of a Georgia location is attested by the fact that the state produces nearly twice as much paint as any other state in the seven-state market area. In addition, Georgia leads the seven-state area in wholesale paint and varnish sales.

APPENDIX

Appendix 1

DETAILED ESTIMATES OF VALUE OF SHIPMENTS OF PAINT, VARNISH, AND LACQUER
IN THE SEVEN STATES, THE SOUTH, AND THE UNITED STATES, 1958
(in thousands of dollars)

PART A: SELECTED TRADE SALES PRODUCTS

Product Identification	Ala.	Fla.	Ga.	Miss.	N. C.	S. C.	Tenn.	Seven States[1]	South[2]	U. S.
TOTAL TRADE	$4,050[1]	$12,265	$21,563	$300[1]	$4,054	$950[1]	$7,909	$51,091	$153,405	$899,177
Exterior Use										
Oil paints, enamels, varnishes in ready-mixed form										
Oil and alkyd vehicle house paints (SIC 2851121)	D	1,390	4,602	D	D	D	1,913	10,500	32,947	176,460
Enamels (SIC 2851123)	381	550	1,351	Z	D	D	D	2,900	9,928	62,629
Under coatings and primers (SIC 2851125)	D	326	500	D	D	D	460	1,400	4,091	27,845
Traffic paints (all types) (SIC 2851132)	D	129	D	D	Z	Z	D	*4,600	6,075	14,337
Water-thinned paints										
Other than dry lime and cement bound (SIC 2851145)	Z	739	605	---	D	D	D	*3,000	3,387	13,186
Interior Use										
Oil paints, enamels, and varnishes in ready-mixed form										
Mill white paints (SIC 2851151)	D	D	D	---	D	Z	D	*1,800	2,605	18,223
Flat wall paints, including semi-paste (SIC 2851153)	D	905	1,409	Z	D	D	D	3,500	13,148	80,471
Gloss and semi-gloss, including enamels (SIC 2851155)	D	762	2,658	Z	D	D	653	6,600	16,278	102,554
Under coatings and primers (SIC 2851156)	D	134	458	---	D	D	D	900	2,809	20,045
Varnishes										
Synthetic resin base varnish (SIC 2851163)	---	169	364	Z	D	---	D	1,000	3,466	17,179
Water-thinned paints										
Latex base: Butadiene-Styrene (SIC 2851181)	D	---	4,095	---	D	---	D	4,900	13,616	104,448
Latex base: Vinyl and others (SIC 2851182)	D	999	1,345	Z	D	D	D	*6,000	11,757	36,063

Note: Legend and footnotes are at end of table.

Appendix 1 (Continued)

PART B: SELECTED INDUSTRIAL PRODUCT FINISHES AND SPECIAL COATINGS

Product Identification	Ala.	Fla.	Ga.	Miss.	N. C.	S. C.	Tenn.	Seven States[1/]	South[2/]	U. S.
TOTAL INDUSTRIAL	$2,470	$1,542	$7,628	$550[1/]	$8,128	$950[1/]	$1,100	$22,378	$68,316	$627,976
Specially formulated coatings										
For the interior of industrial plants (SIC 2851211)	Z	D	D	---	D	D	---	*2,000	3,430	24,998
For the exterior of industrial plants (SIC 2851213)	D	D	D	---	D	---	---	*4,000	8,168	25,185
Marine paints, ship bottom and other specially formulated paints (SIC 2851218)	D	Z	D	---	D	---	---	*5,000	6,599	26,149
Pigmented industrial product finishes, excluding lacquer										
Undercoaters and primers (SIC 2851222)	D	50	262	D	D	D	D	*1,700	6,601	50,739
Alkyd and oil type automotive finishes (SIC 2851236)	D	D	889	D	D	---	---	1,000	1,944	62,814
Alkyd and oil type appliance finishes (SIC 2851238)	---	---	Z	---	Z	D	---	*2,000	2,749	25,556
Alkyd and oil type other finishes (SIC 2851239)	Z	---	1,170	---	359	D	D	*3,500	5,361	87,015
Other types (SIC 2851240)	D	---	Z	---	---	D	---	*2,000	2,382	24,283
Clear industrial product finishes, excluding lacquer										
Synthetic resin base varnishes, alkyd only (SIC 2851243)	---	Z	D	---	563	---	---	*2,000	2,122	22,722
Lacquers										
Clear cellulose nitrate (SIC 2851271)	---	D	D	---	3,385	D	D	* 900	9,924	52,821
Pigmented cellulose nitrate (SIC 2851281)	---	D	D	---	1,452	---	---	*2,800	5,243	60,773

Legend:
- D Withheld
- Z Less than $10,000
- * Less than
- --- Zero

Source: U. S. Census of Manufactures, 1958

1/ Estimated from statistics in original source.

2/ Includes the South Atlantic states (Delaware, Washington, D. C., West Virginia, Virginia, North Carolina, South Carolina, Georgia, Florida, and Maryland), the East South Central states (Kentucky, Tennessee, Alabama, and Mississippi), and the West South Central states (Louisiana, Texas, Arkansas, and Oklahoma).